

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
LUFKIN DIVISION**

Personal Audio, LLC,

Plaintiff,

V.

Apple Inc.,

Sirius XM Radio, Inc.,

Coby Electronics, Corp.,

Archos, Inc.,

Defendants.

Case 9:09-cv-00111-RC

DECLARATION OF KEVIN C. ALMEROOTH

I, Kevin C. Almeroth, declare and state as follows:

1. I am a professor in the Department of Computer Science at the University of California in Santa Barbara. At the University of California—Santa Barbara, I am also the Associate Director of the Center for Information Technology and Society, and a founding faculty member of the Media Arts and Technology Program, Technology Management Program and the Computer Engineering Program. I have B.S., M.S. and Ph.D. degrees in Computer Science from the Georgia Institute of Technology. I have authored nearly 200 refereed papers in the field of Computer Science, and have testified in numerous patent cases. My experience in the area of computer science is more fully described in my curriculum vitae, a true and correct copy of which is attached as Exhibit A.

2. I have been asked to review the common specification of the '076 and '178 patents to identify the structure that the specification identifies for performing functions recited in the asserted claims.

3. I have reviewed the corresponding structure set forth by Personal Audio in the column entitled "Plaintiff's Proposed Constructions and Supporting Evidence" in what has been identified to me as the Rule 4-3 joint proposed claims construction Exhibits A and B. That column sets forth the structure that is identified in the specification for performing the functions recited in the claims, in my opinion reviewing the specification as one of skill in the art.

4. I understand that Personal Audio has proposed that a person of ordinary skill in the art of the invention would have the equivalent of a four-year degree from an accredited institution in either computer science or computer engineering with a concentration of courses in programming and the development and use of hardware and software, and approximately two to three years of programming experience or additional graduate education that could substitute for this experience. This is an appropriate definition of one of ordinary skill in the art of the invention, and I meet this definition.

5. I understand there is a dispute as to whether a "processor" denotes structure to one of skill in the art. Based on my training and expertise, and my reading of the specification, a "processor" has a definite structure.

6. If the Court were to determine that the processor claims are controlled by 35 U.S.C. § 112(6), below, I have identified the corresponding structure that the specification identifies for performing the functions of the "processor."

7. For the claims that recite a "processor," "processing means," or which otherwise involve software, the corresponding structure includes an algorithm dictated by the flowchart in


Figure 3 and explanatory narrative in the specification. I have been asked whether Personal Audio's statements of the corresponding structure set forth the algorithm necessary to perform the function, and whether the algorithms recited place a limitation on the claims. They do. In each case, the corresponding structure is specifically the portion of the flowchart of Figure 3, and the specific explanatory narrative for the function performed by the processor. In most cases the algorithm accomplishes the function in two or three steps shown in Figure 3. Although there are several ways to design or program a processor to perform the steps, the recitation of the steps places a limitation on the design of the device. Processors are capable of many functions beyond what is recited in the corresponding steps, and there are other ways to deliver a series of digital audio programs, other than using the algorithms described by portions of Figure 3.

8. I have reviewed the corresponding structure for the "output means for producing audible sounds in response to analog audio signals" in Claim 14 of the '176 patent. Analog signals are the output of a digital-to-analog conversion such as might be done by a sound card. As disclosed in the specification, the "output means" are a speaker or headphones. The sound card does not "respond" to analog signals, and is not part of the structure that corresponds to "output means" that function "in response" to analog signals.

9. I understand that Apple and Sirius are proposing that the structure corresponding to "means for continuously reproducing . . ." includes a "486-DX2-66 processor," a sound card detailed in "Hardware Design Guide for Microsoft Windows 95, by Doug Klopfenstein, Microsoft Press, ISBN 1-55615-642-1," and software for decoding a program segment "into 16-bit audio data at 8, 11, 22, or 44 KHz and providing the decoded data to the soundcard at a corresponding appropriate rate." These details are unnecessary to perform the function. The necessary structure identified by the specification is a processor, a sound card, a speaker or

headphones, and the algorithm specified in items 233, 235, 237, 239 and 261 of Figure 3 of the common specification.

Executed this 30th day of June, 2010, in Hawai'i.

By: 
Kevin C. Almeroth
Declarant